HENRY B. BIGELOW
NOAA
R 225

GENERAL NOTES:

1. THE VESSEL SHALL BE CLASSIFIED UNDER ABS MALTESE CROSS A1, CIRCLE E, UNRESTRICTED SERVICE AND ICE CLASS C0.
2. ALL MATERIAL SHALL BE ORDINARY STRENGTH STEEL, GRADE A, UNLESS ONTERWISE NOTED.
3. DEEP TANK OVERFLOW HEIGHTS ARE ASSUMED AT THREE FEET ABOVE THE WEATHER DECK ABOVE THE TANK.
4. WORKMANSHIP SHALL BE IN ACCORDANCE WITH THE NOAA "STATEMENT OF REQUIREMENTS" AND ACCEPTABLE COMMERCIAL MARINE QUALITY.
5. ALL WELDING SHALL BE IN ACCORDANCE WITH REFERENCE NO. 1.
6. END CONNECTION DETAILS SHALL BE IN ACCORDANCE WITH HMI STANDARDS, REFERENCE NO. 3.
7. STIFFENER & GIRDER END CONNECTIONS SHALL BE DESIGNATED AS FOLLOWS:
   "EC-S": CUT MEMBER ONE INCH SHORT
   "EC-W": WEB IS CONNECTED
   "EC-F": FULL CONNECTION – WEB AND FLANGE STRENGTH MAINTAINED.
   "EC-A": EFFECTIVE BRACKET PER ABS 90-m RULES, SECTION 3/2.9
8. UNLESS OTHERWISE NOTED, ALL END CONNECTIONS SHALL BE "EC-F".
9. COPES, SNIPES AND DRAINS SHALL BE IN ACCORDANCE WITH HMI STANDARDS, REFERENCE NO. 3.
10. ALL PLATES AND SHAPES ARE IN IMPERIAL UNITS. ALL DIMENSIONS ARE IN METRIC UNITS.
11. FRAME SPACING = 600 mm.
12. THE DECK-TO-SHELL CONNECTION ON THE EXPOSED MAIN DECK SHALL BE ROUNDED WITH A 150 mm RADIUS.
13. GIRDERS SHALL BE FITTED WITH TRIPPING BRACKETS AT 3000 OR MAX. OF 5 FRAME SPACINGS.
14. THE CORNER RADIUS OF OPENINGS IN DECKS & SHELL, MUST BE GENERALLY 1/8 THE TRANSVERSE DIMENSION OF THE OPENING, WITH A MINIMUM OF 150 & A MAXIMUM OF 600. ON MAIN TRANSVERSE BULKHEADS, THE RADIUS MUST BE 1/20 OF THE VERTICAL WITH A MINIMUM OF 150.
15. FILL & DRAIN HOLES TO BE MADE IN RUDDER FAIRING PLATE FOR 'FLOAT COAT'
16. STERN RAMP & RAMP SIDES TO BE PLATED WITH ASTM A 514 STEEL GRADE 'B'

AS-BUILT

△6 2

FUNCTIONAL DESIGN DRAWING
NOT FOR CONSTRUCTION

RESERVATIONS:

SH	DESCRIPTION
4	SECTIONS
3	SECTIONS
2	PLANS & SECTIONS
1	TITLE SHEET

DRAWING INDEX

NO.	TITLE	DRAWING NUMBER
17	STEERING GEAR FOUNDATION	M282-561-FM03
16	STEERING GEAR (VENDOR DWG)	A-9078
15	TRANSDUCER DWG	M282-461-FE93
14	RAMP DOOR (VENDOR DWG)	HI-953-5000
13	BECKER RUDDER (VENDOR DWG)	A-1.6003
12	DECK LIFTING EQUIPMENT. FOUNDATION BOOKLET	M282-582-FH35
11	FENDERING DETAILS.	M282-111-FH36
10	TRAWL WINCH FOUNDATION.	M282-591-FH75
9	TRAWLRAMP PLATFORM, TRAWLWAY & FISH SLUICE LAYOUT	M282-591-FH74
8	MOORING AND TOWING FITTINGS FOUNDATIONS	M282-170-FH28
7	DECK FITTINGS AND TIEDOWNS – KEY PLAN AND DETAILS	M282-611-FH89
6	BOSSING AND STERN FRAME	M282-100-FH18
5	BULWARKS LAYOUT AND SCANTLINGS	M282-100-FH17
4	STRUCTURAL DOORS, HATCHES & MANHOLES – KEY PLAN & SCHEDULE	M282-167-FH62
3	TYPICAL STRUCTURAL DETAILS	M282-100-FH67
2	HULL STERNBODY SCANTLING FR.49 – FR. 91	M282-110-FH04
1	WELDING BOOKLET	M282-100-FH90

REFERENCES

REVISIONS

REV	ZONE	DESCRIPTION	DATE	APPROVED
6		1. SH 1, EXTENDED HULL APPLICABILITY TO HULL 1957. 2. SH 1, ADDED "AS-BUILT" STAMP, APPLICABLE TO M282 ONLY. ITEMS 1 & 2 PER ENGINEERING DEVELOPMENT.	7/31/06 MDP	8/11/06 SM
7		1. SH 2, PLAN 15-C, ELEVATION 16-B & ELEVATION 12-A; ADDED 12"X4"X5/8" FLG PL TO UNDERDECK STRUCTURE BENEATH AFT A-FRAME GANTRY (P/S). 2. SH 4, SECTION 28-D FRAME 96, SECTION 28-B FRAME 97, SECTION 28-A FRAME 98 & SECTION 26-D FRAME 99; ADDED 12"X4"X5/8" FLG PL TO UNDERDECK STRUCTURE BENEATH AFT A-FRAME GANTRY (P/S). ITEMS 1 & 2 PER ENGINEERING DEVELOPMENT.	2/1/07 MDP	

REVISIONS

REV	ZONE	DESCRIPTION	DATE	APPROVED
1		1. SH 2, PLAN 13-D: ADDED NOTATION FOR STIFFENER CUTOUTS IWO TRAWL WINCH FDN BOLTS; ZONE 14-B: REVISED CALLOUT FOR DETAIL TO REFLECT PROPER ZONE & ADDED DIM FOR STIF CO. 2. SH 2, PLAN 15-C: REVISED HEADER CONFIGURATION & ADDED 400# DECK CUTOUT TO SUIT NEW STYLE OF CAPSTAN, P/S. ITEM 1 PER ENGINEERING DEVELOPMENT. ITEM 2 PER REWORK #741-0006	01/27/04 WH/	1/27/04 RG
2		1. SH 2, PLAN 15-C: RELOCATED STARBOARD LONG'L GIRDERS FROM 5000 AND 5625 TO 5290 AND 5860 OCL, RESPECTIVELY, TO SUIT RELOCATION OF CRANE PEDESTAL. 2. SH 2, ELEV. 9-D: REVISED LOCATION OF STBD GIRDERS FROM 5000 AND 5625 TO 5290 AND 5860 OCL, RESPECTIVELY, TO SUIT RELOCATION OF CRANE PEDESTAL. 3. SH. 3, SECT. 23-D, 23-B & 23-A: REVISED LOCATION OF STBD LONG'L GIRDERS TO 5290 AND 5860 OCL. ITEMS 1 THRU 3 BY DIRECTION OF PROGRAM MANAGER	3/30/04 AE	3/31/04 RG
3		1. SH 2, PLAN 15-C: RELOCATED STARBOARD LONG'L GIRDERS FROM 5290 AND 5860 TO 5000 AND 5625 OCL, RESPECTIVELY, TO SUIT RELOCATION OF CRANE PEDESTAL. 2. SH 2, ELEV. 9-D: REVISED LOCATION OF STBD GIRDERS FROM 5290 AND 5860 TO 5000 AND 5625 OCL, RESPECTIVELY, TO SUIT RELOCATION OF CRANE PEDESTAL. 3. SH. 3, SECT. 23-D, 23-B & 23-A: REVISED LOCATION OF STBD LONG'L GIRDERS TO 5000 AND 5625 OCL. ITEMS 1 THRU 3 BY DIRECTION OF PROGRAM MANAGER	8/16/04 RMW	8/17/04 RG
4		1. SH 2, PLAN 15-C: DELETED P/S DECK CUTOUTS FOR GALLOWS AND ADDED NEW DECK CUTOUTS FOR CABLE AND VENT PENETRATIONS TO SUIT NEW GALLOWS BASE; REVISED LAYOUT OF TRANSVERSE DECK STIFFENERS IWO REVISED DECK CUTOUTS; DELETED LONGITUDINAL GIRDER 4750 OCL; ADDED 15x12x1 LONGITUDINAL DECK GIRDERS AT 4375 AND 5575 OCL, FROM FRAME 97 TO TRANSOM; CHANGED TRANSVERSE DECK GIRDER AT FRAME 97, SIDE SHELL TO NT BHD FROM 18x5/8 WEB W/8x1 FLG TO 24x1 WEB W/8x1 FLANGE GIRDER; RELOCATED P/S MOORING BITTS LOCATED INBOARD OF GALLOWS TO FRAME 90 P/S. 2. SH 2, ELEVATION 14-A: ADDED 15x12x1 BUILT-UP TEE. 3. SH 2, ELEVATION 13-A: DELETED BULKHEAD NOTCHES FOR TRAWL RAMP COVER SUPPORTS. 4. SH 2, ELEVATION 9-C: DELETED TRAWL WINCH FLAG BLOCK FROM VIEW; MODIFIED VERTICAL WEB FRAME TO ELIMINATE SLOPING FACE; DELETED EXISTING TRANSVERSE BUILT-UP TEE; AND ADDED TRANSVERSE DECK STIFFENER L8x4x1/2 AT FRAME 100. 5. SH 2, ELEVATION 9-B: DELETED TRAWL WINCH FLAG BLOCK; MODIFIED VERTICAL WEB FRAME TO TIE INTO NEW DECK LONGITUDINAL GIRDER AT 5575 OCL AND REMOVED SLOPING FACE PLATE; DELETED 6x3/8 DECK COAMING; AND DELETED EXISTING TRANSVERSE BUILT-UP TEE AND ADDED 15x5/8 WEB W/6x1 FLANGE BUILT-UP TEE IN ITS PLACE. 6. SH 2, ELEVATION 11-B: DELETED DECK TRANSVERSE STIFFENER; AND DELETED 18x5/8 WEB W/8x1 FLANGE BUILT-UP TEE AND REPLACED WITH 24x1 WEB W/8x1 FLANGE BUILT-UP TEE AT FRAME 97. 7. SH 2, ELEVATION 10-B: ADDED TRAWL WINCH FLAG BLOCK; ADDED DECK CUTOUTS FOR CABLE AND VENT PENETRATIONS; REVISED DECK STRUCTURE LAYOUT TO SUIT DECK CUTOUTS; ADDED 1" DIA ROUND BAR IWO DECK CUTOUTS; AND DELETED EXISTING DECK TRANSVERSE GIRDER AT FRAME 97 AND ADDED 24x1 WEB W/8x1 FLANGE BUILT-UP TEE. 8. SH 2, PLAN 13-D: RELOCATED HEADER UNDERNEATH TRAWL WINCH FOOTPAD FROM 250 FWD OF FRAME 86 TO 370 FWD OF FRAME 86; AND REVISED TRANSOM SCANTLING LAYOUT TO INCLUDE ADDITIONAL VERTICAL WEB FRAMES. 9. SH 4, FRAMES 97 THRU TRANSOM: REVISED STRUCTURE LAYOUT TO SUIT CHANGES IN DECK STRUCTURE LISTED IN ITEM 1. 10. SH 4, PLAN ON WEBS: ADDED ADDITIONAL VERTICAL WEB AND 1" HORIZONTAL PLATE. ITEMS 1 THRU 10 PER ECP 0083	10/6/04 AE/KC	10/19/04 RG
5		1. EXTENDED HULL APPLICABILITY TO INCLUDE HULL 1956. 2. SHT 4, FR 100 & TRANSOM: REVISED STRUCTURE IWO PENDULUM BLOCK FDN. 3. SHT 2, ELEVATION 13-A & 13-C: REVISED TRIPPING BKT SHOWN AS RELEVANT TO EXPOSED VIEW. ITEM 1&3 PER ENGINEERING DEVELOPMENT. ITEM 2 PER AS-BUILT CONDITIONS.	3/18/05 RMW	3/24/05 FH

DOCUMENT DISTRIBUTION RECORD

DATE IN ROOM	1/21/04	1/27/04	3/31/04	8/17/04	10/22/04	3/23/05	7/31/06						
ISSUE DATE	1/22/04	1/28/04	4/2/04	8/18/04	10/22/04	3/24/05	8/11/06						
REV#	0	1	2	3	4	5	6	7					
PROJECT ENG	1	1	1	1	1	1	1						
PROJECT MGR	1	1	1	1	1	1	1						
ABS	10				10								
USPH													
USCG								1					
HMP PC	12	12	12	12	12	12	12	1					
PROD DESIGN GROUP	1(3)	1(3)	1(3)	1(3)	1(3)	1(3)	1(3)	1					
HULL MGR													
HULL LEAD	(1)	(1)	(1)	(1)	(1)	(1)	(1)	1					
HVAC	1	1	1	1	1	1	1						
JOINER	1												
HPG PC	3	3	3(1)	3(1)	3(1)	3(1)	3(1)	1					
NOISE CONT													
CHAND LLC													
ISSUED BY	AE	AE	AE	AE	AE	AE	SM						

HULL APPLICABILITY

△5 1 M282 HULL 1953
△5 1 M283 HULL 1956
△6 1 M284 HULL 1957

10	9	8	7	6	5	4	3	2	1	REV
							7	3	7	REV
										SHT

REVISION STATUS

DRL NUMBERS

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VT Halter Marine, Inc.
Vision Technologies Systems

DRAWN BY	WH 7/23/03	ABS APPV	
CHECKED BY	AE 1/20/04	USCG APPV	
APPROVED BY	RG 1/20/04	OWNER APPV	
HULL NO	APPLICABILITY	CAGE CODE	3B213
SIZE	D		
ESTIMATE NO	00-104	SCALE	NONE

VESSEL: FRV40 CLASS 63m FISHERIES RESEARCH VESSEL

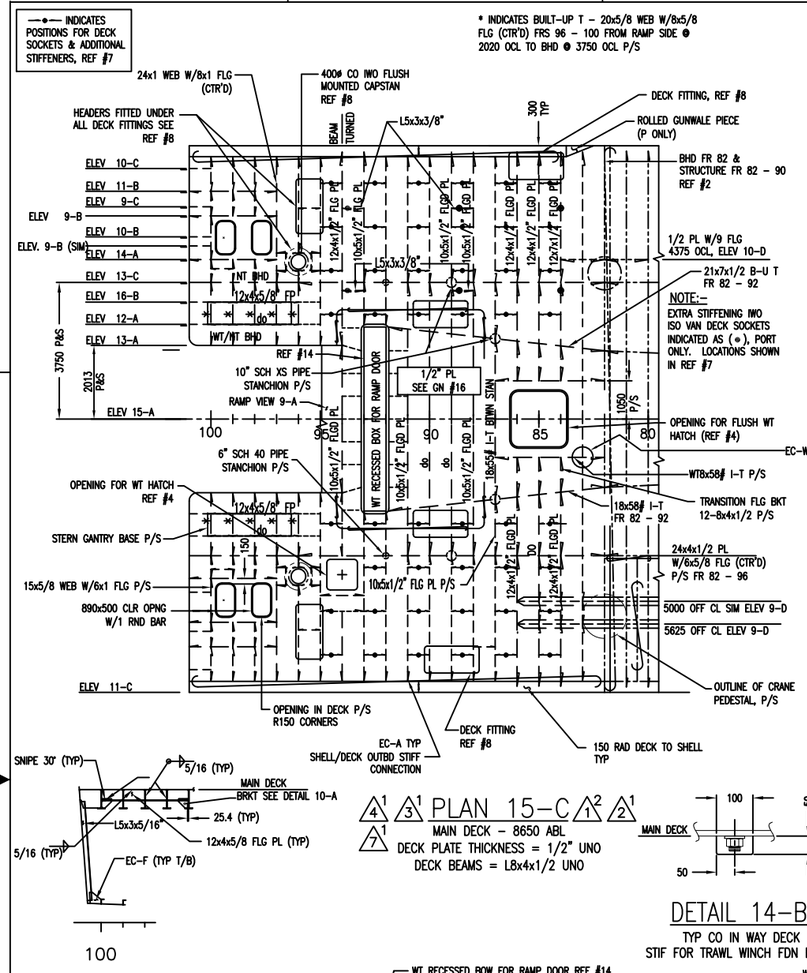
TITLE: HULL TRANSOM SCANTLINGS FR. 82 – TRANSOM

JOB NO.	ITEM	DELIVERABLE	SHEET	REV
M282	100	FH05	001	07

FILE R:\M282\FUNCTIONAL DESIGN\IN WORK\HULLDWG | SHEET 1 OF 4

PLOT: 1=1

DWG NO. M282-110-FH05 SH 1

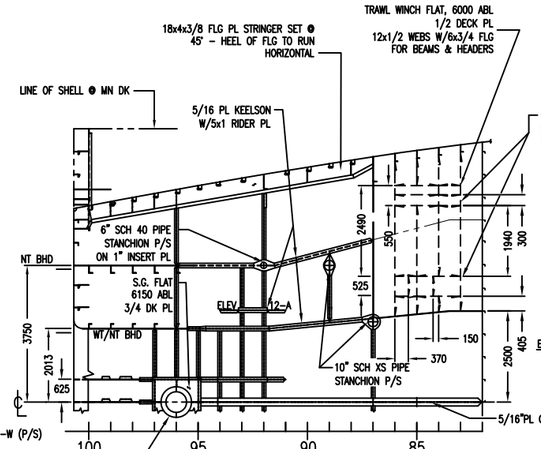

—●— INDICATES POSITIONS FOR DECK SOCKETS & ADDITIONAL STIFFENERS, REF #7
* INDICATES BUILT-UP T – 20x5/8 WEB W/8x5/8 FLG (CTR'D) FRS 96 – 100 FROM RAMP SIDE ● 2020 OCL TO BHD ● 3750 OCL P/S
24x1 WEB W/8x1 FLG (CTR'D)
400# CO IWO FLUSH MOUNTED CAPSTAN REF #8
HEADERS FITTED UNDER ALL DECK FITTINGS SEE REF #8
L5x3x3/8"
DECK FITTING, REF #8
ROLLED GUNWALE PIECE (P ONLY)
BHD FR 82 & STRUCTURE FR 82 – 90 REF #2
1/2 PL W/9 FLG 4375 OCL, ELEV 10–D
21x7x1/2 B–U T FR 82 – 92
NOTE:– EXTRA STIFFENING IWO ISO VAN DECK SOCKETS INDICATED AS (●), PORT ONLY. LOCATIONS SHOWN IN REF #7
ELEV 10–C
ELEV 11–B
ELEV 9–C
ELEV 9–B
ELEV 10–B
ELEV 9–B (SIM)
ELEV 14–A
ELEV 13–C
ELEV 16–B
ELEV 12–A
ELEV 13–A
ELEV 15–A
ELEV 11–C
NT BHD
WT/NT BHD
REF #14
10" SCH XS PIPE STANCHION P/S
1/2" PL SEE GN #16
RAMP VIEW 9–A
WT RECESSED BOX FOR RAMP DOOR
OPENING FOR FLUSH WT HATCH (REF #4)
EC–W (P/S)
6" SCH 40 PIPE STANCHION P/S
OPENING FOR WT HATCH REF #4
WT8x58# I–T P/S
TRANSITION FLG BKT 12–8x4x1/2 P/S
18x58# I–T FR 82 – 92
STERN GANTRY BASE P/S
24x4x1/2 PL W/6x5/8 FLG (CTR'D) P/S FR 82 – 96
15x5/8 WEB W/6x1 FLG P/S
5000 OFF CL SIM ELEV 9–D
890x500 CLR OPNG W/1 RND BAR
5625 OFF CL ELEV 9–D
OUTLINE OF CRANE PEDESTAL, P/S
OPENING IN DECK P/S R150 CORNERS
EC–A TYP SHELL/DECK OUTBD STIFF CONNECTION
DECK FITTING REF #8
150 RAD DECK TO SHELL TYP
3750 P&S
2013 P&S
1050 P/S
SNIPE 30° (TYP)
5/16 (TYP)
MAIN DECK
BRKT SEE DETAIL 10–A
25.4 (TYP)
L5x3x5/16"
12x4x5/8 FLG PL (TYP)
EC–F (TYP T/B)

PLAN 15–C

MAIN DECK – 8650 ABL
DECK PLATE THICKNESS = 1/2" UNO
DECK BEAMS = L8x4x1/2 UNO

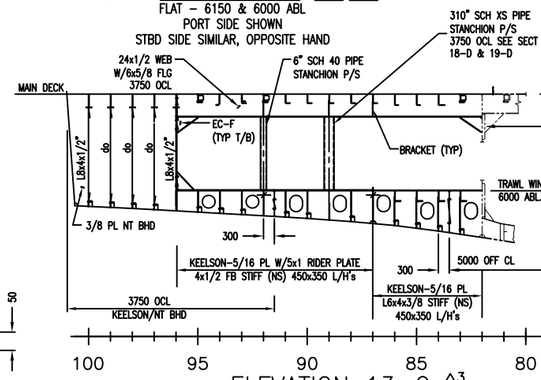
DETAIL 14–B

TYP CO IN WAY DECK STIF FOR TRAWL WINCH FDN BOLTS



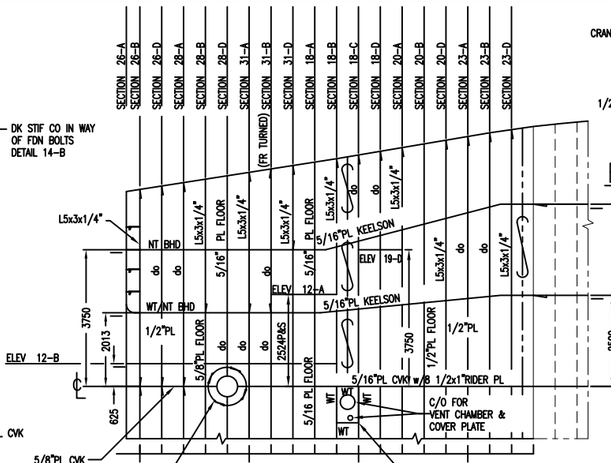
PLAN 13–D

FLAT – 6150 & 6000 ABL
PORT SIDE SHOWN
STBD SIDE SIMILAR, OPPOSITE HAND


MAIN DECK
24x1/2 WEB W/6x5/8 FLG 3750 OCL
6" SCH 40 PIPE STANCHION P/S
310" SCH XS PIPE STANCHION P/S 3750 OCL SEE SECT 18–D & 19–D
L8x4x1/2
EC–F (TYP T/B)
BRACKET (TYP)
BHD FR 82 & STRUCTURE REF #2
TRAWL WINCH FLAT 6000 ABL
3/8 PL NT BHD
KEELSON–5/16 PL W/5x1 RIDER PLATE 4x1/2 FB STIFF (NS) 450x350 L/H's
5000 OFF CL
KEELSON–5/16 PL L6x4x3/8 STIFF (NS) 450x350 L/H's
3750 OCL KEELSON/NT BHD

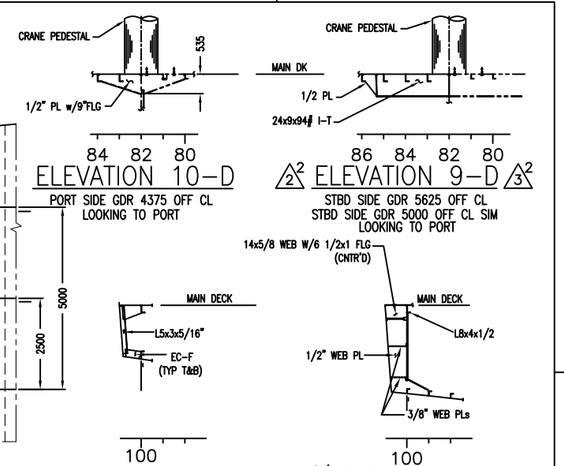
ELEVATION 13–C

OUTBOARD LONG'L KEELSON/BHD P/S
PORT SIDE SHOWN LOOKING OUTBD
STBD SIDE SIMILAR, OPPOSITE HAND



PLAN 11–D

BOTTOM SHELL
PORT SIDE SHOWN
STBD SIDE SIMILAR, OPPOSITE HAND



ELEVATION 10–D

PORT SIDE GDR 4375 OFF CL
LOOKING TO PORT

ELEVATION 9–D

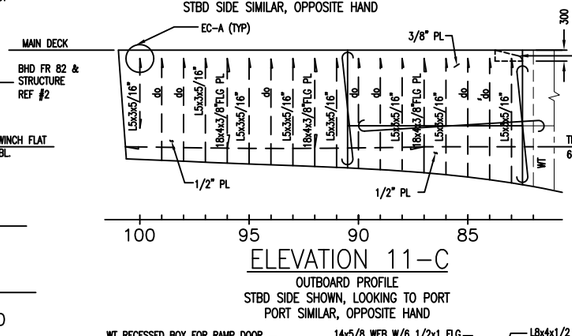
STBD SIDE GDR 5625 OFF CL
STBD SIDE GDR 5000 OFF CL SIM
LOOKING TO PORT

ELEVATION 10–C

TRANSOM FRAME 6875 OCL
PORT SIDE SHOWN, LOOKING OUTBOARD
STBD SIDE SIMILAR, OPPOSITE HAND

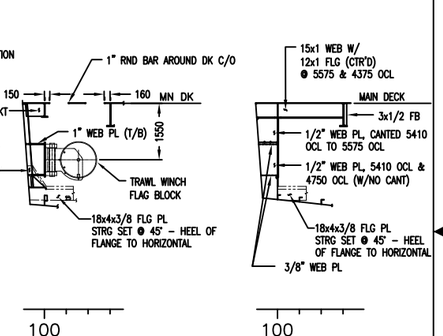
ELEVATION 9–C

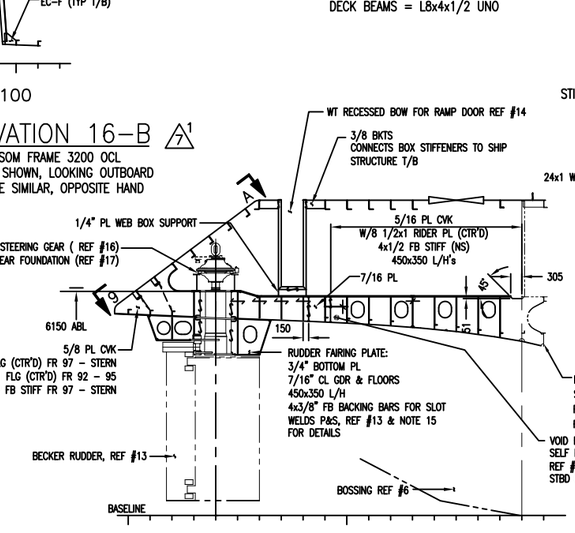
TRANSOM FRAME 5825 OCL
PORT SIDE SHOWN, LOOKING OUTBOARD
STBD SIDE SIMILAR, OPPOSITE HAND



ELEVATION 11–C

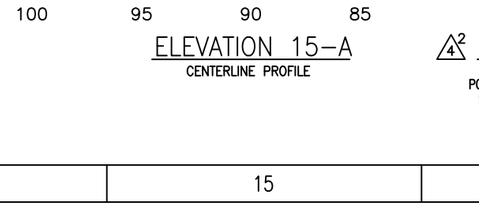
OUTBOARD PROFILE
STBD SIDE SHOWN, LOOKING TO PORT
PORT SIMILAR, OPPOSITE HAND


1" RND BAR AROUND DK C/O
150
160 MN DK
1/2" PL BKT
1" WEB PL (T/B)
1550
L5x3x5/16"
TRAWL WINCH FLAG BLOCK
18x4x3/8 FLG PL STRG SET ● 45° – HEEL OF FLANGE TO HORIZONTAL
15x1 WEB W/ 12x1 FLG (CTR'D) ● 5575 & 4375 OCL
MAIN DECK
3x1/2 FB
1/2" WEB PL, CANTED 5410 OCL TO 5575 OCL
1/2" WEB PL, 5410 OCL & 4750 OCL (W/NO CANT)
18x4x3/8 FLG PL STRG SET ● 45° – HEEL OF FLANGE TO HORIZONTAL
3/8" WEB PL


WT RECESSED BOW FOR RAMP DOOR REF #14
3/8 BKTS CONNECTS BOX STIFFENERS TO SHIP STRUCTURE T/B
1/4" PL WEB BOX SUPPORT
STEERING GEAR (REF #16) STEERING GEAR FOUNDATION (REF #17)
5/16 PL CVK W/8 1/2x1 RIDER PL (CTR'D) 4x1/2 FB STIFF (NS) 450x350 L/H's
7/16 PL
305
6150 ABL
5/8 PL CVK W/4x1/2 FLG (CTR'D) FR 97 – STERN 8 1/2x1 FLG (CTR'D) FR 92 – 95 & 4x1/2 FB STIFF FR 97 – STERN
RUDDER FAIRING PLATE: 3/4" BOTTOM PL 7/16" CL GDR & FLOORS 450x350 L/H 4x3/8" FB BACKING BARS FOR SLOT WELDS P&S, REF #13 & NOTE 15 FOR DETAILS
BHD 82 & STRUCTURE FR 82–50 REF #2
VOID FOR SELF NOISE HYDROPHONE REF #15 STBD ONLY
BECKER RUDDER, REF #13
BOSSING REF #6
BASELINE

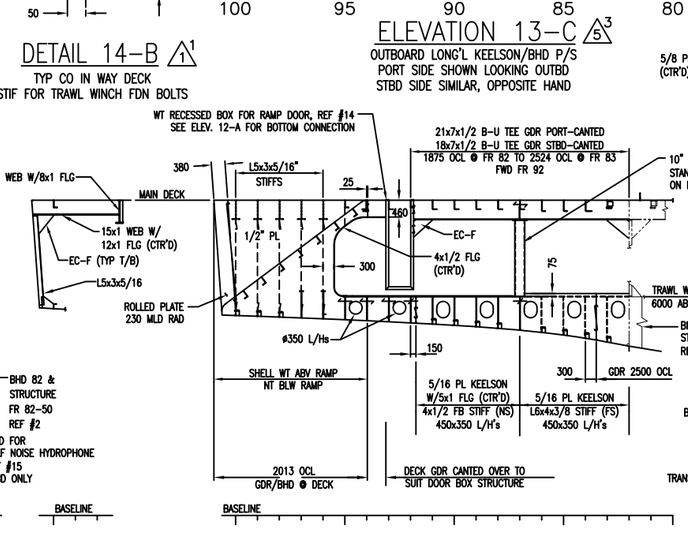
ELEVATION 16–B

TRANSOM FRAME 3200 OCL
PORT SIDE SHOWN, LOOKING OUTBOARD
STBD SIDE SIMILAR, OPPOSITE HAND



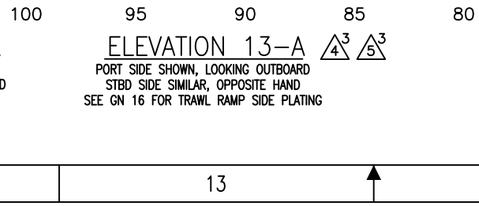
ELEVATION 15–A

CENTERLINE PROFILE


WT RECESSED BOX FOR RAMP DOOR, REF #14
SEE ELEV. 12–A FOR BOTTOM CONNECTION
21x7x1/2 B–U TEE GDR PORT–CANTED
18x7x1/2 B–U TEE GDR STBD–CANTED
1875 OCL ● FR 82 TO 2524 OCL ● FR 83 FWD FR 92
10" SCH XS PIPE STANCHION, CTR'D ON DECK GDR
24x1 WEB W/8x1 FLG
MAIN DECK
15x1 WEB W/ 12x1 FLG (CTR'D)
EC–F (TYP T/B)
L5x3x5/16"
STIFFS
380
25
460
1/2" PL
300
EC–F
4x1/2 FLG (CTR'D)
75
ROLLED PLATE 230 MLD RAD
TRAWL WINCH FLAT 6000 ABL
BHD FR 82 & STRUCTURE REF #2
ø350 L/Hs
150
SHELL WT ABV RAMP NT BLW RAMP
5/16 PL KEELSON W/5x1 FLG (CTR'D) 4x1/2 FB STIFF (NS) 450x350 L/H's
5/16 PL KEELSON L6x4x3/8 STIFF (FS) 450x350 L/H's
GDR 2500 OCL
2013 OCL GDR/BHD ● DECK
DECK GDR CANTED OVER TO SUIT DOOR BOX STRUCTURE
BASELINE

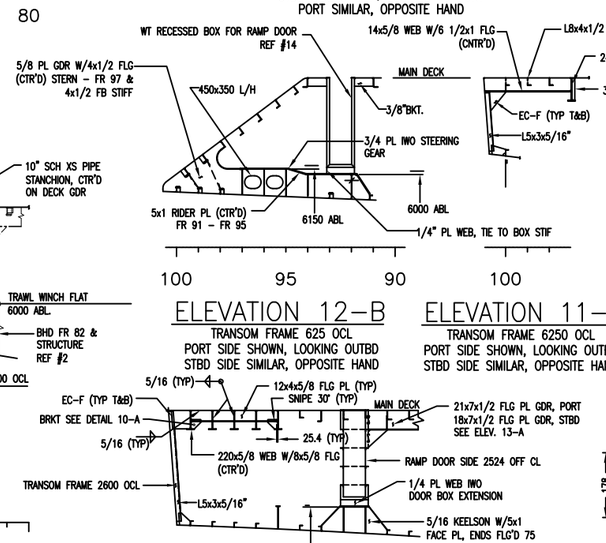
ELEVATION 14–A

TRANSOM FRAME 4375 OCL
PORT SIDE SHOWN, LOOKING OUTBOARD
STBD SIDE SIMILAR, OPPOSITE HAND



ELEVATION 13–A

PORT SIDE SHOWN, LOOKING OUTBOARD
STBD SIDE SIMILAR, OPPOSITE HAND
SEE GN 16 FOR TRAWL RAMP SIDE PLATING

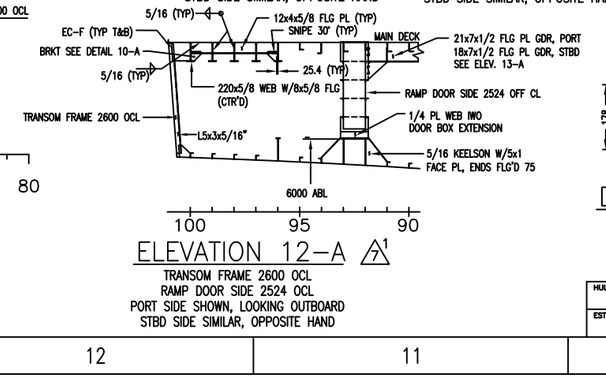

WT RECESSED BOX FOR RAMP DOOR REF #14
14x5/8 WEB W/6 1/2x1 FLG (CNTR'D)
L8x4x1/2 STIFF ON OUTBD SIDE
24x1 WEB W/8x1 FLG (CTR'D)
3x1/2 FB
5/8 PL GDR W/4x1/2 FLG (CTR'D) STERN – FR 97 & 4x1/2 FB STIFF
450x350 L/H
MAIN DECK
3/8"BKT.
3/4 PL IWO STEERING GEAR
EC–F (TYP T&B)
L5x3x5/16"
5x1 RIDER PL (CTR'D) FR 91 – FR 95
6150 ABL
6000 ABL
1/4" PL WEB, TIE TO BOX STIF

ELEVATION 12–B

TRANSOM FRAME 625 OCL
PORT SIDE SHOWN, LOOKING OUTBD
STBD SIDE SIMILAR, OPPOSITE HAND

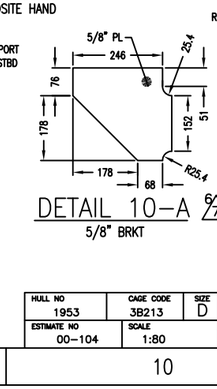
ELEVATION 11–B

TRANSOM FRAME 6250 OCL
PORT SIDE SHOWN, LOOKING OUTBD
STBD SIDE SIMILAR, OPPOSITE HAND



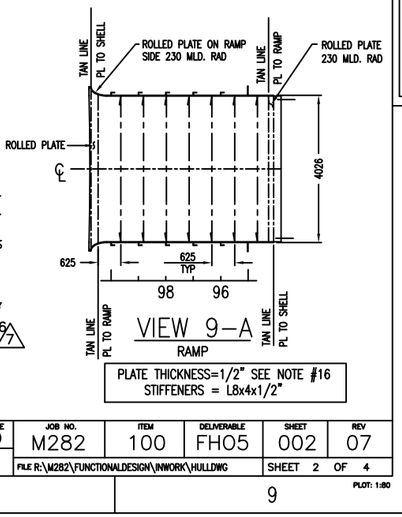
ELEVATION 12–A

TRANSOM FRAME 2600 OCL
RAMP DOOR SIDE 2524 OCL
PORT SIDE SHOWN, LOOKING OUTBOARD
STBD SIDE SIMILAR, OPPOSITE HAND



DETAIL 10–A

5/8" BRKT


TAN LINE PL TO SHELL
ROLLED PLATE ON RAMP SIDE 230 MLD. RAD
TAN LINE PL TO RAMP
ROLLED PLATE 230 MLD. RAD
ROLLED PLATE
4026
625 TYP
98 96
TAN LINE PL TO RAMP
TAN LINE PL TO SHELL

VIEW 9–A

RAMP

PLATE THICKNESS=1/2" SEE NOTE #16
STIFFENERS = L8x4x1/2"

ELEVATION 10–B

TRANSOM FRAME 5000 OCL
PORT SIDE SHOWN, LOOKING OUTBOARD
STBD SIDE SIMILAR, OPPOSITE HAND

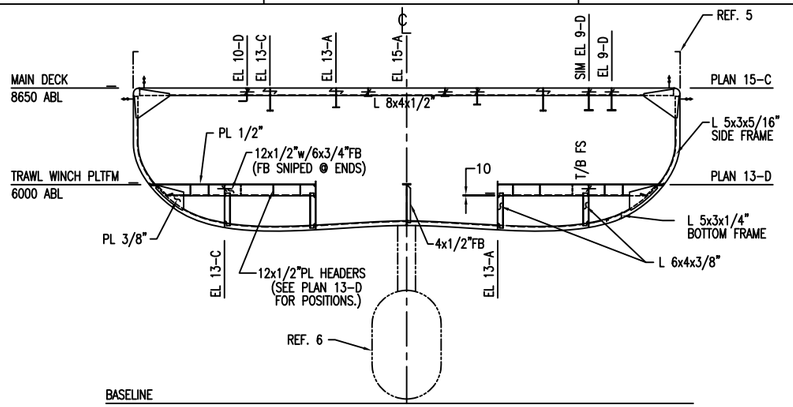
ELEVATION 9–B

TRANSOM FRAME 5410/5575 OCL
PORT SIDE SHOWN, LOOKING OUTBOARD
STBD SIDE SIMILAR, OPPOSITE HAND
TRANSOM FRAME 4750 OCL SIMILAR

HULL NO	CAGE CODE	SIZE	JOB NO.	ITEM	DELIVERABLE	SHEET	REV
1953	3B213	D	M282	100	FH05	002	07
ESTIMATE NO	SCALE		FILE R:\M282\FUNCTIONALDESIGN\INWORK\HULLDWG			SHEET 2 OF 4	
00–104	1:80						

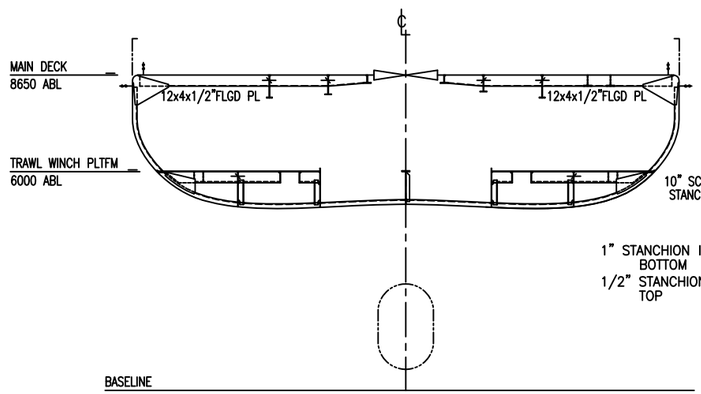
DWG NO. M282–110–FH05 SH 2

PLOT: 1:80



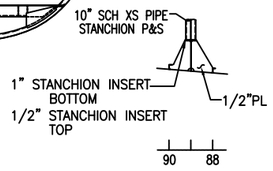
SECTION 23–D FRAME 83 $\frac{2^3}{3^3}$

LOOKING FORWARD



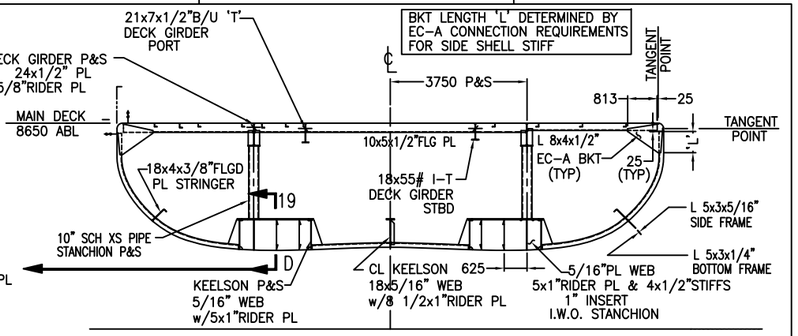
SECTION 20–D FRAME 86

LOOKING FORWARD
FOR DETAILS NOT SHOWN
SEE SECTION 23–D

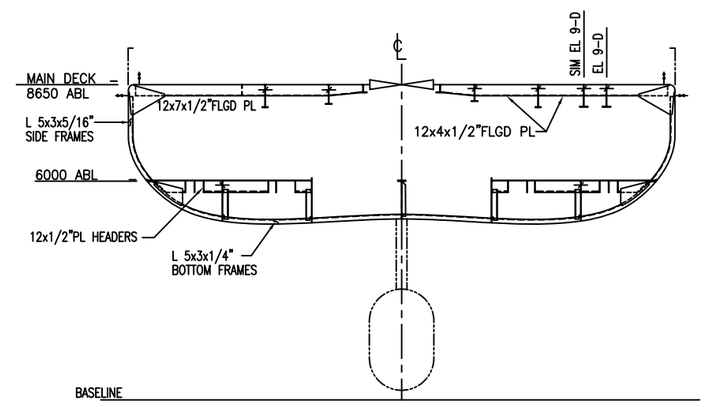


ELEVATION 19–D

LOOKING TO PORT

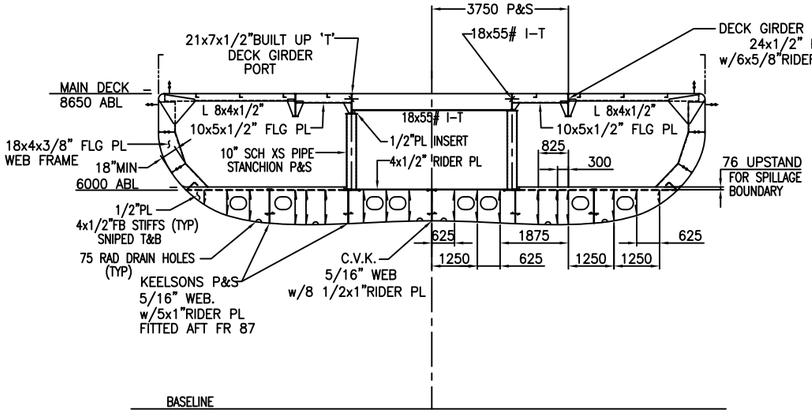


SECTION 18–D FRAME 89



SECTION 23–B FRAME 84 $\frac{2^3}{3^3}$

LOOKING FORWARD
FOR DETAILS NOT SHOWN
SEE SECTION 23–D



SECTION 20–B FRAME 87

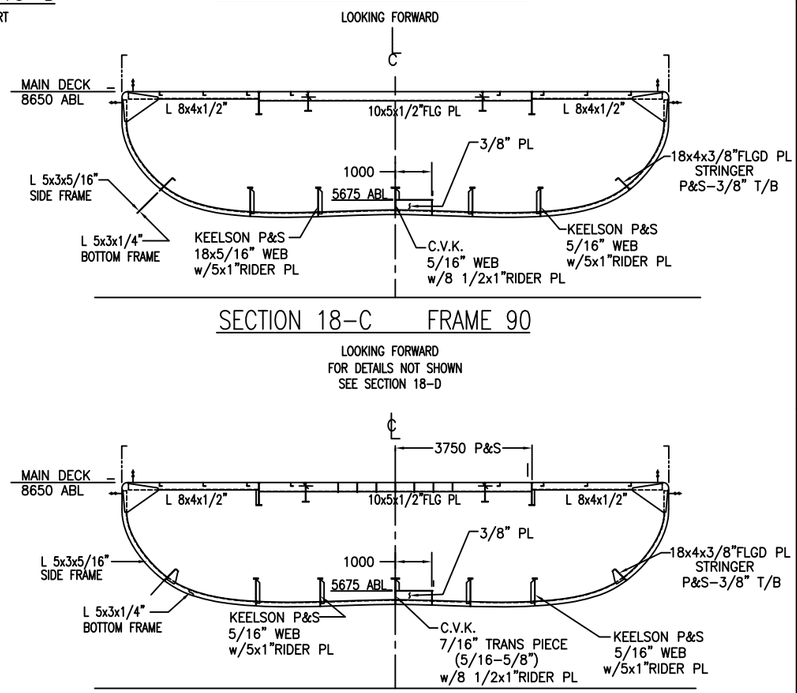
LOOKING FORWARD

SECTION 23–A FRAME 85 $\frac{2^3}{3^3}$

LOOKING FORWARD
FOR DETAILS NOT SHOWN
SEE SECTION 23–D

SECTION 20–A FRAME 88

LOOKING FORWARD

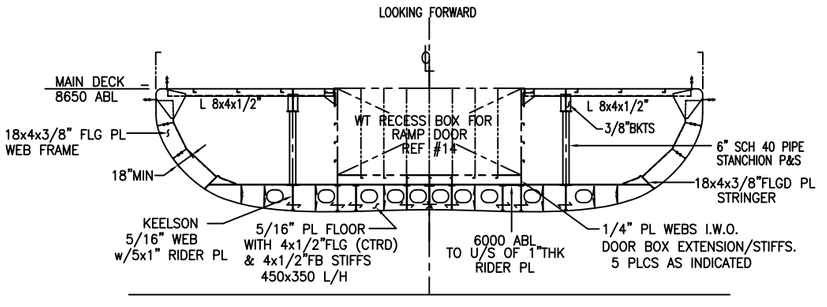


SECTION 18–C FRAME 90

LOOKING FORWARD
FOR DETAILS NOT SHOWN
SEE SECTION 18–D

SECTION 18–B FRAME 91

LOOKING FORWARD



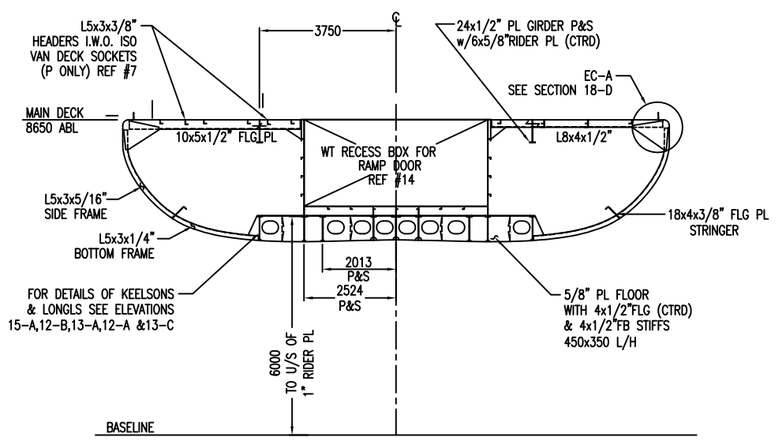
SECTION 18–A FRAME 92

LOOKING FORWARD

NOTE: INTERCOSTAL DECK TRSV STIFFENER END CONNECTIONS AT CONT. GIRDERS SHALL BE EC–W

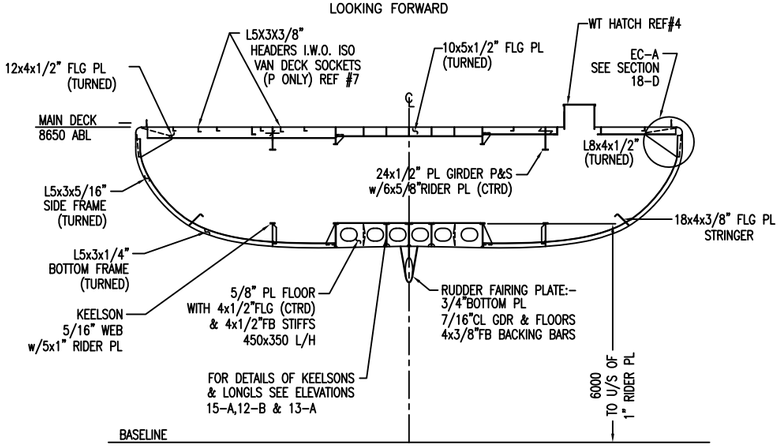
HULL NO	CAGE CODE	SIZE	JOB NO.	ITEM	DELIVERABLE	SHEET	REV
1953	3B213	D	M282	100	FH05	03	03
ESTIMATE NO	SCALE		FILE R:\M282\FUNCTIONAL DESIGN\IN WORK\HULLDWG			SHEET 3 OF 4	
00–104	1:80						PLOT: 1:80

DWG NO. M282–110–FH05 SH 3


L5x3x3/8" HEADERS I.W.O. ISO VAN DECK SOCKETS (P ONLY) REF #7
3750
24x1/2" PL GIRDER P&S w/6x5/8"RIDER PL (CTRD)
EC-A SEE SECTION 18-D
MAIN DECK 8650 ABL
10x5x1/2" FLG PL
WT RECESS BOX FOR RAMP DOOR REF #14
L8x4x1/2"
L5x3x5/16" SIDE FRAME
18x4x3/8" FLG PL STRINGER
L5x3x1/4" BOTTOM FRAME
2013 P&S
2524 P&S
FOR DETAILS OF KEELSONS & LONGLS SEE ELEVATIONS 15-A,12-B,13-A,12-A &13-C
5/8" PL FLOOR WITH 4x1/2"FLG (CTRD) & 4x1/2"FB STIFFS 450x350 L/H
6000 TO U/S OF 1" RIDER PL
BASELINE

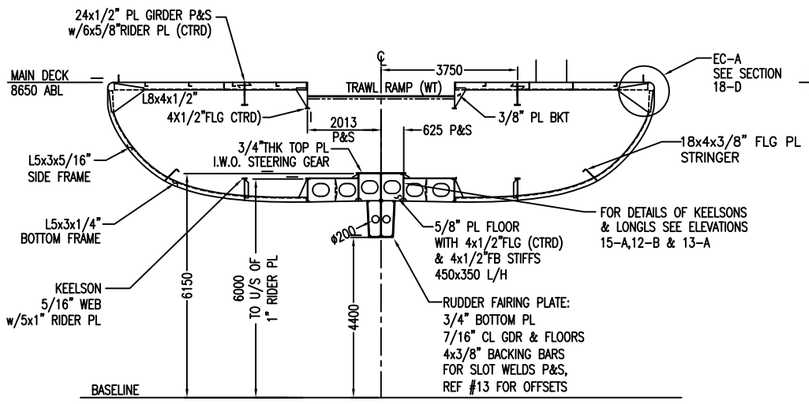
SECTION 31-D FRAME 93

LOOKING FORWARD


L5X3X3/8" HEADERS I.W.O. ISO VAN DECK SOCKETS (P ONLY) REF #7
12x4x1/2" FLG PL (TURNED)
10x5x1/2" FLG PL (TURNED)
WT HATCH REF#4
EC-A SEE SECTION 18-D
MAIN DECK 8650 ABL
L8x4x1/2" (TURNED)
24x1/2" PL GIRDER P&S w/6x5/8"RIDER PL (CTRD)
L5x3x5/16" SIDE FRAME (TURNED)
18x4x3/8" FLG PL STRINGER
L5x3x1/4" BOTTOM FRAME (TURNED)
KEELSON 5/16" WEB w/5x1" RIDER PL
5/8" PL FLOOR WITH 4x1/2"FLG (CTRD) & 4x1/2"FB STIFFS 450x350 L/H
RUDDER FAIRING PLATE:- 3/4"BOTTOM PL 7/16"CL GDR & FLOORS 4x3/8"FB BACKING BARS
FOR DETAILS OF KEELSONS & LONGLS SEE ELEVATIONS 15-A,12-B & 13-A
6000 TO U/S OF 1" RIDER PL
BASELINE

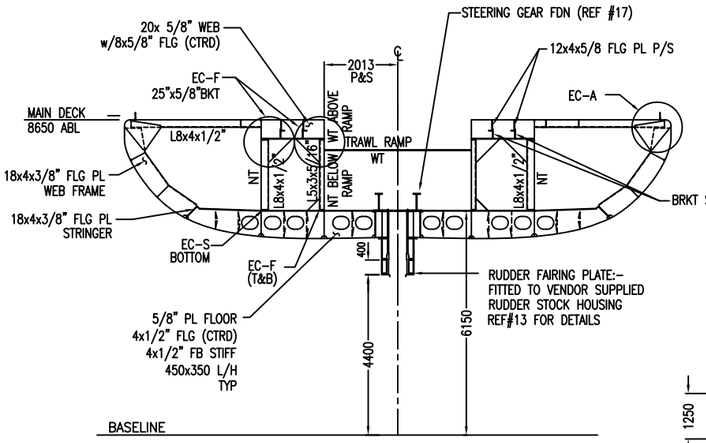
SECTION 31-B FRAME 94

LOOKING FORWARD


24x1/2" PL GIRDER P&S w/6x5/8"RIDER PL (CTRD)
3750
EC-A SEE SECTION 18-D
MAIN DECK 8650 ABL
TRAWL RAMP (WT)
L8x4x1/2" 4X1/2"FLG CTRD)
2013 P&S
625 P&S
3/8" PL BKT
3/4"THK TOP PL I.W.O. STEERING GEAR
L5x3x5/16" SIDE FRAME
18x4x3/8" FLG PL STRINGER
L5x3x1/4" BOTTOM FRAME
FOR DETAILS OF KEELSONS & LONGLS SEE ELEVATIONS 15-A,12-B & 13-A
ø200
5/8" PL FLOOR WITH 4x1/2"FLG (CTRD) & 4x1/2"FB STIFFS 450x350 L/H
KEELSON 5/16" WEB w/5x1" RIDER PL
6150
6000 TO U/S OF 1" RIDER PL
4400
RUDDER FAIRING PLATE: 3/4" BOTTOM PL 7/16" CL GDR & FLOORS 4x3/8" BACKING BARS FOR SLOT WELDS P&S, REF #13 FOR OFFSETS
BASELINE

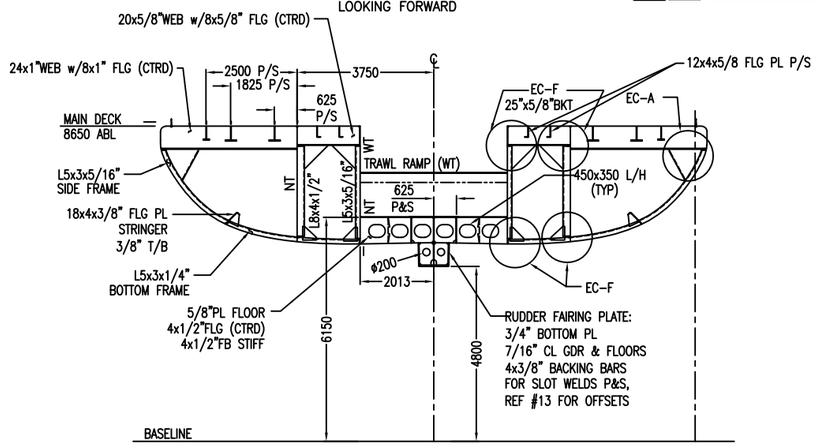
SECTION 31-A FRAME 95

LOOKING FORWARD



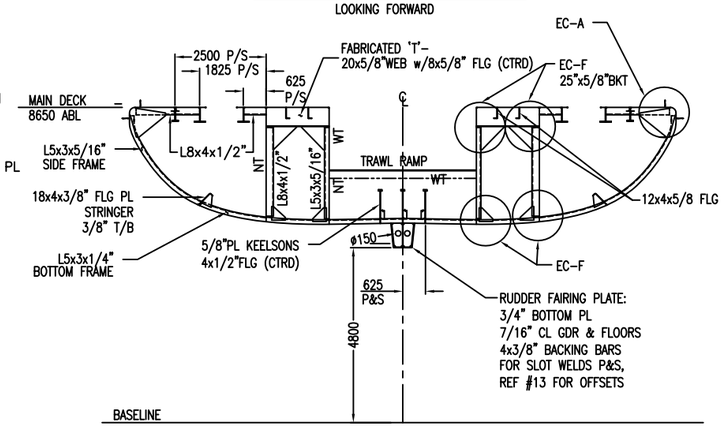
SECTION 28-D FRAME 96 △7 2

LOOKING FORWARD



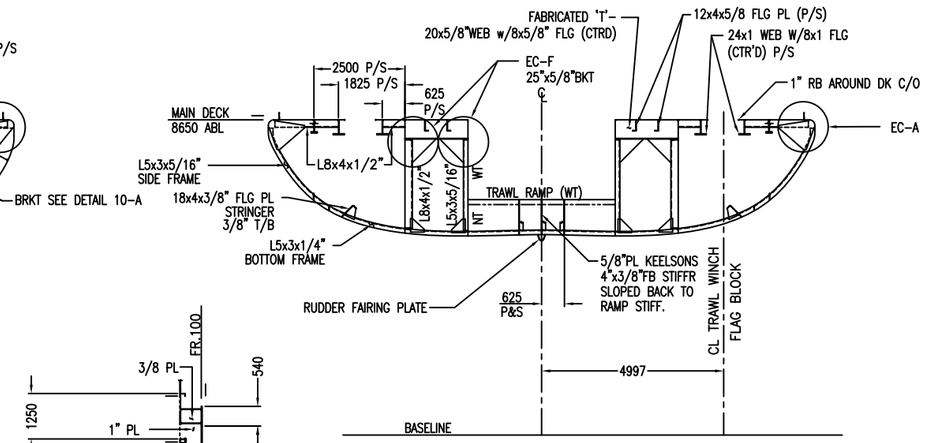
SECTION 28-B FRAME 97 △9 4 △7 2

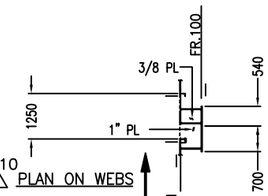
LOOKING FORWARD



SECTION 28-A FRAME 98 △9 4 △7 2

LOOKING FORWARD

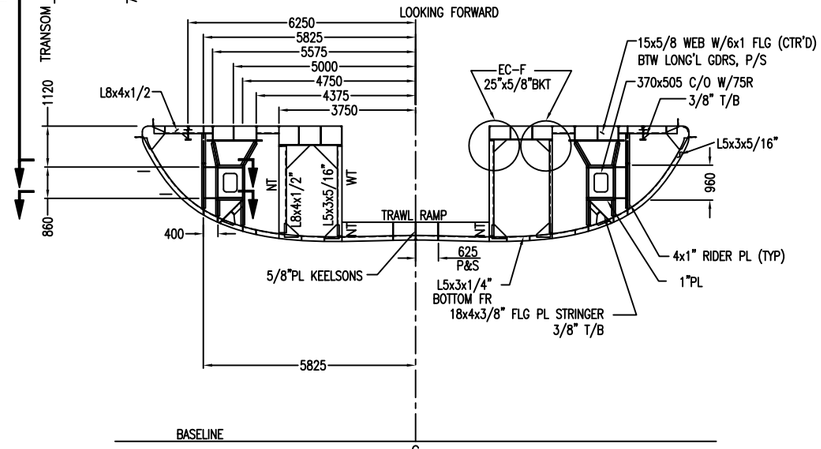




△5 2 △4 10 PLAN ON WEBS

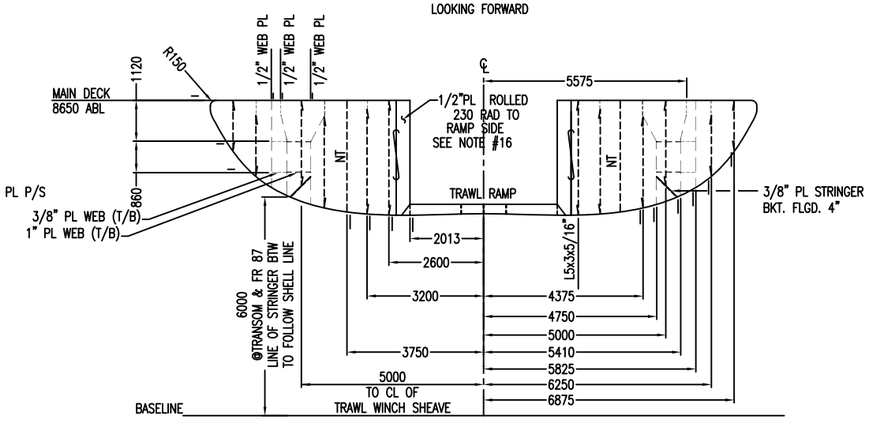
SECTION 26-D FRAME 99 △9 4 △7 2

LOOKING FORWARD



SECTION 26-B FRAME 100 △9 4 △5 2

LOOKING FORWARD



SECTION 26-A TRANSOM △9 4 △5 2

LOOKING FORWARD
TRANSOM PLATING 1/2 UNO
TRANSOM STIFFENERS L5x3x5/16 UNO

NOTE: INTERCOSTAL DECK TRSV STIFFENER END CONNECTIONS AT CONT. GIRDERS SHALL BE EC-W

HULL NO	CAGE CODE	SIZE	JOB NO.	ITEM	DELIVERABLE	SHEET	REV
1953	3B213	D	M282	100	FH05	004	07
ESTIMATE NO	SCALE		FILE R:\M282\FUNCTIONAL DESIGN\IN WORK\HULLDWGS			SHEET 4 OF 4	
00-104	1:80						PLOT: 1:80

DWG NO. M282-110-FH05 SH 4